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ABSTRACT

This paper on identifying education outcomes for students with disabilities proposes a framework for applying an outcome-based approach throughout the education system, by looking at the needs of the three major levels of the system (local, state, and national); defining different uses for the term "outcome" in order to achieve consensus and understanding; and matching uses with the needs of the specific levels of the system. The paper organizes use of the term "outcomes" into three categories: learning outcomes, actualized outcomes, and system outcomes. Education is not seen as a traditional linear system, but rather as an interactive and dynamic system where each level has the power to influence all other levels. Each level of the educational system must attend to four demands for collecting data--program improvement, policy development, accountability, and public information. Differences in the scope and focus of decisions that must be made at each level, and resulting data priorities, vary from one level of the system to the next. Priorities and degree of specificity should be taken into consideration for both defining an outcome and establishing data collection systems. An outcome-driven education system can then be developed by effectively using the principles that started with the outcome-based education movement and the data collected from an outcome-driven accountability system. (Contains 18 references.) (JDD)

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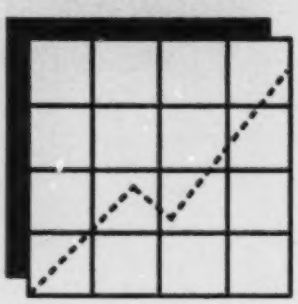

Outcome-Based Education: Its Relevance to State and National Decision Making

National Center on Educational Outcomes

The College of Education
UNIVERSITY OF MINNESOTA

in collaboration with

St. Cloud State University
and
National Association of State Directors of Special Education

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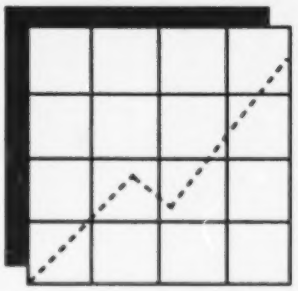

Outcome-Based Education: Its Relevance to State and National Decision Making

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October, 1993

The National Center on Educational Outcomes (NCEO), established in 1990, works with state departments of education, national policy-making groups, and others to facilitate and enrich the development and use of indicators of educational outcomes for students with disabilities. It is believed that responsible use of such indicators will enable students with disabilities to achieve better results from their educational experiences. The Center represents a collaborative effort of the University of Minnesota, the National Association of State Directors of Special Education, and St. Cloud State University.

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Outcome-Based Education: Its Relevance to State and National Decision Making

Since 1990, the staff of the National Center On Educational Outcomes for Students with Disabilities (NCEO) has been engaged in a national dialogue in an effort to identify a set of outcomes for students with disabilities. The activity of the NCEO has been stimulated by the push within education to shift from a process to a product (outcome or results) orientation. This dialogue has been filled with a variety of opinions and discussions. Building consensus has been a challenge, due in part to the variety of perceptions about what "should be" considered valued outcomes for students with disabilities.

The effort to identify outcomes, which began in the 1980s with the outcome-based education movement, was initiated at the local level as a vehicle for radically improving student learning. Within this school-based reform effort, outcomes have focused exclusively on the results of student learning. As the push for an outcome-based approach in education spread to the state and national levels, discussions about outcomes, including defining and using them, became more diffused. I propose that this was due to the differing perceptions arising from the differing demands at the various levels of the education system. Unfortunately, these differences are rarely articulated; and, the term "outcome" is rarely described or differentiated according to the varying needs of the specific levels.

This paper was developed to propose a framework for applying an outcome-based approach throughout the education system. I do this by looking at the needs of the three major levels of the system (local, state, and national). I argue that it is necessary to define different uses for the term "outcome" in order to achieve consensus and understanding. Matching uses with the needs of the specific levels of the system will help clarify communications and facilitate the process of identifying expected outcomes.

Outcome-Based Education (OBE)

A complete history and description of OBE as an educational movement are covered elsewhere (King & Evans, 1991; Spady, 1992a; Spady & Marshall, 1991; Ysseldyke, Thurlow, & Bruininks, 1992; Ysseldyke, Thurlow, & Shriner, 1992). A brief summary of OBE is provided here to establish a common framework for the discussion that follows.

OBE started as a means for influencing and changing the instructional process that occurs within classrooms. It was intended to change instructional practice by refocusing attention on the desired results of a defined unit of learning (e.g., end of schooling, end of year, end of content unit). Essentially, OBE started as an approach (or process) for improving decisions that have an impact on instruction at the local education level (i.e., the classroom, school building, and district).

As time has passed and the OBE movement has grown, it has expanded to include a larger context. Policy makers and others at state and national levels have adopted the OBE label and now appear to refer to OBE, not as a process of change for the local level only, but as a potential framework for transforming the entire education system. Within this expanded OBE framework, decisions about education at all levels would be made on the basis of desired and acquired outcomes, or end results. In other words, we would have an outcome-driven system of education.

Spady (1992b) indicated that OBE is driven by the need to re-focus and re-define the system, including the system's fundamental purposes, premises, principles, and parameters. This re-focus and re-definition need not be limited to decisions at the local level. Rather, there is significant potential for radically changing the perception of, understanding of, and expectation

for the education of students at all levels of the education system. The challenge is one of determining what outcomes are critical to specify to meet the various decision needs of the different levels of this system.

Many people have wondered why there is a need to change the focus of education from process and input to outcomes. A focus on outcomes directs our attention to that which we expect to see occurring or demonstrated. Goals, objectives, and processes focus our attention on what we hope to achieve or have in place, without clarifying what we are expecting to achieve (i.e., the product or aim). Clearly specifying that which we expect to see demonstrated or produced provides stronger justification and flexibility for determining the appropriate strategies (i.e., processes) to reach those results. In other words, when outcomes are identified there is greater likelihood that the solution (decision) will match the need (desired outcome).

Defining and Using the Term "Outcome"

Defining the term "outcome" seems simple enough. Several people have proposed different definitions (DeStefano & Wagner, 1990; Shavelson, McDonnell, & Oakes, 1989; Spady, 1992a; Ysseldyke, Thurlow, Bruininks, Gilman, Deno, McGrew, & Shriner, 1992). Regardless of how one elaborates the definitions, the bottom line, generally, is that "outcome" is equated with some result or consequence. However, generating definitions appears simpler than using the term consistently, particularly when attempting to identify examples or indicators of outcomes. Examples and indicators vary depending on the individual's focus of concern.

Differences sometimes exist in the way that special educators and general educators identify outcomes. Differences sometimes exist between teacher-identified indicators of outcomes and those identified by state education agency (SEA) staff. Differences sometimes exist in what parents identify as outcomes, in what those working at the national level, those involved in the political process, and those interested in accountability data identify. While many of these differences are subtle, it is important to note and clarify them if outcomes are to be used for developing data systems and making a variety of educational decisions. One way of clarifying the differences is to analyze how the term outcome is used.

Using "Outcome" in the Educational System

There appear to be four ways in which the term "outcome" currently is being used. These are described in brief here.

The expected behavior or result at the end of a period of learning. This is what Spady (1992a) refers to as a culminating demonstration of learning. These outcomes are demonstrations of learning that are evident upon completion of a period of learning activity (e.g., upon exit from school, program, or grade; upon completion of a unit of study). In this context the term **exit outcome** can be applied.

The expected skills that a student will need in order to demonstrate the desired exit (or culminating) outcome. These outcomes are referred to as **enabling outcomes**. They are what emerges as the exit outcome is broken into sets of skills and the learning is individualized to meet varying student needs (e.g., reading requirements, math, use of Braille, dressing, mobility, and social skills). Frey, Lynch, and Jakwerth (1991) have systematically identified a set of unique skills needed by students with varying disabilities in order for them to assume adult roles. These sets of skills, which are considered by many to be necessary outcomes for students with disabilities, are examples of outcomes that fit into this category of enabling outcomes.

The real-life experiences that students have after leaving school. These are the outcomes that have been identified through the transition and follow-along studies (Chadsey-Rusch, Rusch,

& O'Reilly, 1991). They are the actualization of learning through the acquisition of a job, independent living, and self-supporting income. These signify the actual use of skills after the formal learning period ends. These might be referred to as **actualized outcomes**.

The extent to which the system generally is achieving desired outcomes. These might be labeled **system outcomes**. They are not direct evidence that the desired student learning has been achieved, yet they are critical to supporting and sustaining the learning, and are considered correlates of success in education. For example, if students are attending school and not dropping out, then we can presume that the system is achieving a desired expectation of motivating students to stay in school. Staying in school is not evidence that the students are learning, yet being in school (at least for the present time) is a prerequisite if the student is to have the opportunity to learn the expected skills. Likewise, for students with disabilities, participation in an integrated setting is important to having opportunities to learn the expected enabling and exit outcomes. Other examples are related to the family, such as assuring that students arrive at school fed and healthy and thus more ready to learn. Community-oriented examples include the level of satisfaction and willingness to support education.

Increasing attention is being given to system expectations as the debate about school delivery and opportunity-to-learn standards increases (Capitol Publications, 1993: NASDSE, 1993; National Governors' Association, 1993). Darling-Hammond (1992) proposed 12 standards to be considered when constructing an accountability system to support schools and student learning. All 12 standards could be developed into outcome statements and applied as system outcomes. Examples include statements such as: "teachers demonstrate effective instructional skills" or "schools receive equitable funding." While these outcome expectations for the system alone do not guarantee the end product (e.g., adequately prepared young adults), they are critical to supporting and ensuring that the end product is attainable for all students. System outcomes can be equated with those "processes" that facilitate the acquisition of learning outcomes. Stating them as outcomes clearly specifies that which we expect to see demonstrated rather than that which we hope to have in place.

Linking Terms

The first two uses of the term "outcomes" are focused specifically on the learner (i.e., the student) and are more oriented in the present or immediate. More simply stated, these are the outcomes that students are expected to demonstrate upon completion of learning. For the purposes of this paper, these are referred to as **learning outcomes**. (Where it is necessary to distinguish between the two types of learning outcomes, the labels "exit" and "enabling" are used.)

The third use for the term "actualized outcomes" involves the learner; however, the reported results may be influenced by factors outside of the learner. These are the effects of juxtaposing the learning with the larger social system. For example, actualized outcome data related to employment might be influenced by available employment opportunities or available supports more than the individual's skills. System outcomes generally do not tell us about the learner. Rather, the reported results tell us about whether the necessary supports for learning are in place. In other words, these signify that which we expect to see in the educational system as a result of our continued support (e.g., taxes).

Using this linkage and analysis, we are left with three primary categories of outcomes. These are learning, actualized, and system outcomes.

Education As a System

Traditionally, education has been treated as an isolated linear system comprised of three levels -- local, state, and national. An individual's attention and action are dependent upon the

individual's position within this system. For a classroom teacher, the primary focus most likely will be specifically directed by student need and community expectations. A state education agency employee most likely will need to attend to state policy issues and regulatory (accountability) needs. It follows that an employee at the national level will be heavily influenced by national trends, federal policy issues, and regulatory demands.

Given this, it is easy to see that when discussing outcomes in these various levels, the use of the term will tend to be driven by the demands and expectations within the level. However, the tendency has been to use one term with one definition applied to all levels without clearly differentiating or articulating the needs, perceptions, or differences inherent in each of the levels.

In the traditional linear system, influence is perceived to be top down. That is, those at the top of the system influence those at lower levels. In other words, the federal level influences the state level which, in turn, influences the local level. In such a linear system, it is assumed that there is one approach (or in this case definition) that by necessity must be the approach (definition) for all.

It is critical to recognize that the education system is not linear, but rather is an interactive and dynamic system where each level is of equal importance and has the potential power to influence all other levels (see Figure 1). Generally speaking, the local level has the greatest amount of direct contact with the student and family, and therefore, has the greatest potential for having an impact on the student and family. But the impact is not one way. The individual student and family also have the greatest amount of contact with the local system and the greatest potential for influencing the educational system at this level. As one moves to the state level, the immediate or direct impact is on the local level, with the federal level most directly influencing the state level. The same holds true in reverse in that the influence is not one way, but rather goes both ways. Additionally, even though the general tendency is to move through the various levels, influence does not always proceed sequentially, but can jump levels (e.g., local might directly influence national).

Education is not an isolated system, but rather is one piece of a larger human services system (see Figure 2), which is now becoming more interactive in practice and policy. In this larger context, education has responsibility for assuring that students are contributing members of their communities. Being a contributing member is in part dependent upon skill development and in part upon available resources and opportunities in the community that allow the individual to apply the skills and knowledge learned. Assuring that students become contributors requires three conditions.

One condition is that the necessary learning opportunities and instruction are provided so students learn and acquire skills and knowledge. The second is that needed supports are available; and the third is that the skills and knowledge match the expectations of the broader community (e.g., employers). It is generally accepted that children's learning is enhanced if they come from environments that are safe and hunger-free. It is known that students who learn employment skills are more likely to have successful employment opportunities if those opportunities exist in their communities of choice and if, where needed, supports are available to assure continued success as job demands change (e.g., supported work services). The education system shares responsibility for working collaboratively to influence and improve the larger service system by identifying and reporting information that will lead to more accurately defining needs and identifying solutions within the larger system.

If we accept the premise put forth by Spady (1992a) that there is a need to re-focus and re-define the system in order to achieve the desired results, and if we agree that making decisions based on expected outcomes holds greater promise for doing so, OBE principles provide a framework for defining and collecting data for decisions throughout the entire

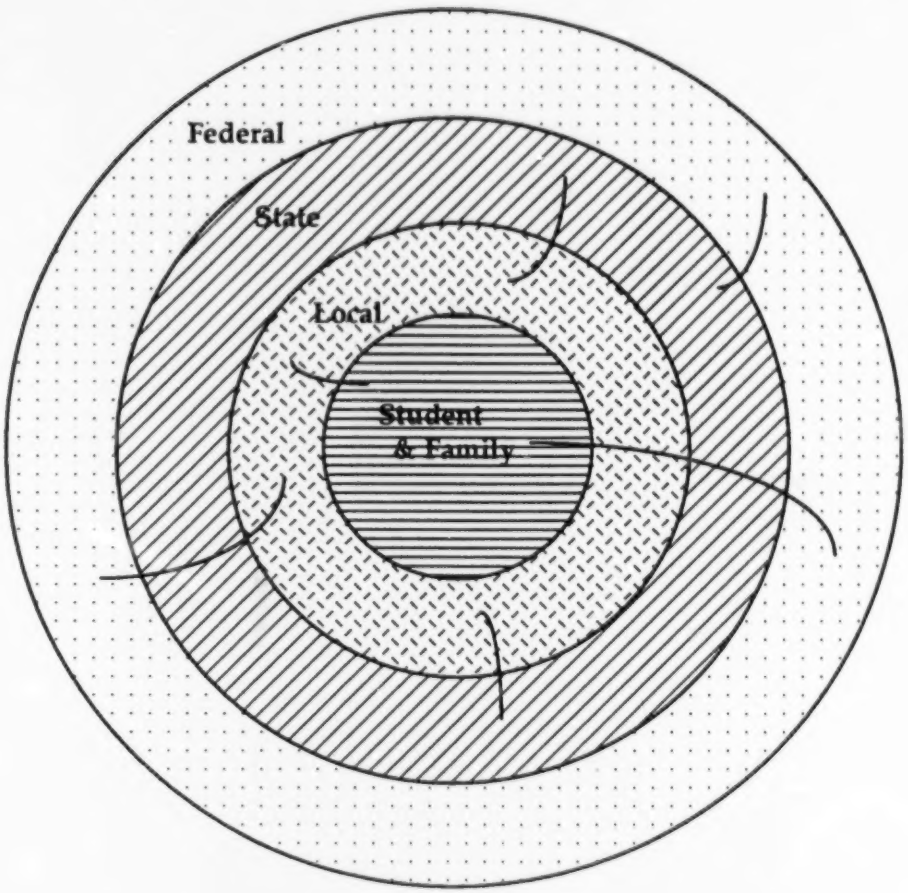

Figure 1 - Interactive, dynamic education system.

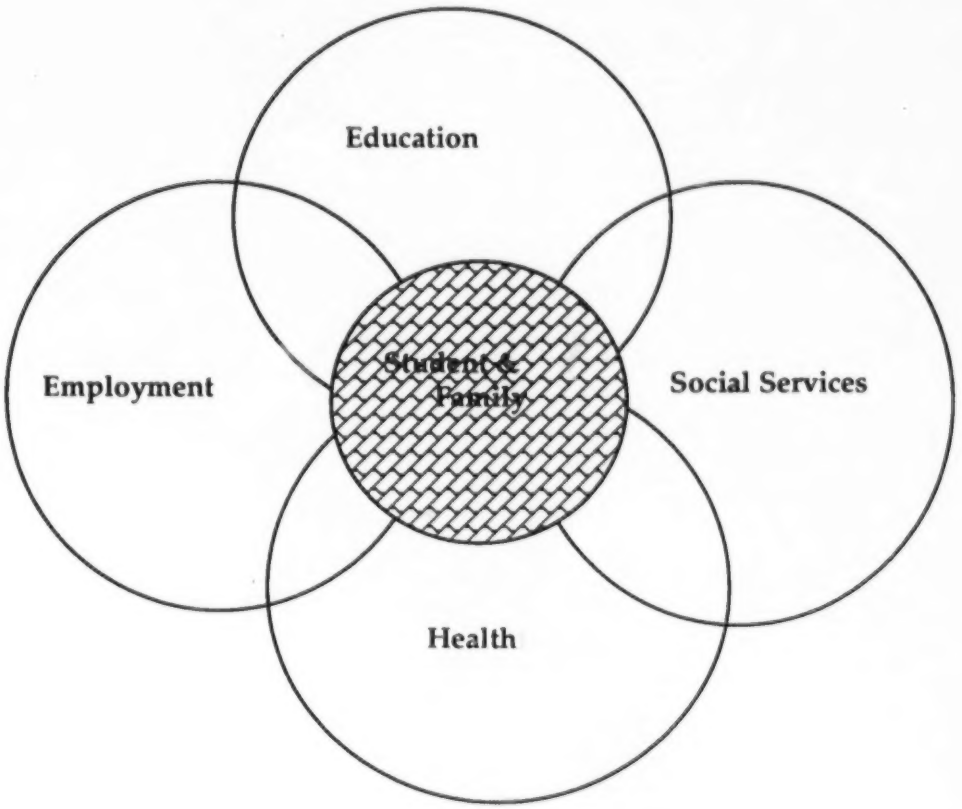

Figure 2 - Interactive, human services system.

education system that support and enhance the three conditions that influence a student's potential to become a successful adult. If we also agree that the outcome focus is situation-specific (i.e., specific to the needs of each level of the educational system), it becomes clear that we must begin to define and articulate the needs of each level in order for the OBE framework to be most powerful.

Purposes for Data Collection

Data have been collected for a long time under the guise of monitoring the effectiveness of the educational system. A recently identified problem is that most data have focused on process (e.g., dollars spent and characteristics of the system). The principles of OBE require focusing on and collecting data about outcomes (i.e., results) rather than processes and inputs. Before looking at the potential use for OBE within the three education system levels, it is important to briefly discuss the importance of and uses for data.

Four demands for collecting data are generally given or assumed (Horvath, 1985; Ysseldyke, Thurlow, & Bruininks, 1992). These fall in the areas of program improvement, policy development, accountability, and public relations. All three levels of the education system are required to respond to all four demands with differing degrees of emphasis.

Program improvement is perhaps the first and foremost reason for needing to collect data (Horvath, 1985). The primary purpose for an education system is to provide quality, effective programs that lead to acquisition of the expected or intended results. Ultimately, the intended results focus on the learner, i.e., the expectation that the learner acquire the skills necessary to become an independent and productive contributor to the community or society. It follows then that program improvement decisions should be based on information that describes the state of learner outcomes (both exit and enabling outcomes). Such information should be used to drive curricular and instructional improvements. However, only considering the degree to which students are learning that which is expected may not be enough to make decisions about the type of program improvement efforts that are needed. Juxtaposing student learning data with system data (e.g., dropout rates, attendance, available resources) enhances decision making by identifying needed improvements in supports that maximize learning and enhance curricular and instructional strategies. Likewise, actualized outcome data may be needed to determine whether program efforts are focusing on real life role expectations. Therefore, learning, actualized, and system outcomes can provide valuable information for maximizing program improvement decisions and efforts.

Policy development sets forth expectations that govern behavioral responses of the individuals who function within the education system. Policy must support and encourage behavior that will lead to the expected and desired results of the system. All three system components rely on policy. Six areas of policy include leadership, learning, inclusion, organization, finance, and renewal (Education Commission of the States, 1991). In the past, policy decisions appear to have been made from a process or input perspective (e.g., determining regulatory procedures). Outcome driven education requires refocusing policy decisions on expected and desired results. Information about those results, therefore, must be known in order to determine policy needs or recommended changes. As with program improvement, policy decisions cannot be determined using learning outcome data alone. Rather, learning outcome data must be supplemented with actualized and system outcome data so that decisions can more adequately address the real problem and not merely curtail a symptom.

A great deal of attention is being given to accountability these days. Simply stated, "accountability means holding someone responsible for his/her actions" (Brown, 1990, p. 3). In private business, customer satisfaction is easily tied to profit and loss statements and serves as an accountability measure. In education, however, the customer is more obscure. First, education

must be accountable to students who are the immediate recipients of instruction and training. However, students are not given responsibility for self-advocacy until the age of eighteen. Therefore, education is held accountable to parents who verbalize the expectations they hold for their child. On the other hand, students and parents do not purchase public education, at least not as a direct out-of-pocket expenditure; the public foots the bill. The public, comprised of business along with individual community members, also demands information that demonstrates that their money has been well spent. Finally, lawmakers are responsible for making decisions on behalf of communities, states, and the nation. As such they too require accountability data in order to assure that their decisions are indeed good decisions. Data that illustrate results of instruction, or the end product, can prove to be a powerful tool for all accountability purposes.

Finally, because education is an endeavor that is of concern to the public at large, there is a need for data that keep the public informed. The public education system is dependent upon public support if it is to be sustained. Therefore, the public not only has the right to information about the effects of education, it has a need to know. Without outcome information, supportive decisions required of the public (e.g., revenue generation or increased community living options) are based on whim and hearsay rather than information that clearly illustrates benefits and results. Outcome information can clearly illustrate that public education is a good investment and that the education system is producing productive citizens who warrant community support. What students are learning (e.g., students demonstrating specific independent living skills) and the changes that result from various aspects of education (e.g., students staying in school or students acquiring productive jobs) are more descriptive pieces of public information than data describing inputs (e.g., how many dollars were spent) or processes (e.g., how many students received community based instruction).

Using Outcome Information

Each of the levels of the educational system must attend to all four purposes or uses of data. Differences exist, however, in the scope and focus of decisions that must be made at each level. Therefore, data priorities as well as degree of specificity will vary from one level to the next. Basing decisions on outcomes can be invaluable as long as priorities and degree of specificity are taken into consideration for both defining an outcome and establishing data collection systems (e.g., identifying those pieces of information that indicate achievement of the outcome).

Local Level

At the local level, the scope and specificity is narrowest, and the greatest emphasis must be on each student in each classroom. This requires that collection of data on learning outcomes be the priority. Parents need to be assured that the educational content deemed important for their students is that which will lead to acquisition of skills and knowledge critical to real life roles. They need information that illustrates what their children are expected to learn and demonstrates what they currently know and can do.

Teachers too need learner focused information for the purpose of determining what to teach. Exit outcomes established for all students give teachers the information needed for determining appropriate general content. However, teachers need data related to enabling outcomes in order to individualize instruction for each student. Administrators at the local level need learning outcome data, both exit and enabling, in order to provide the appropriate resources based on individual student needs.

While learning outcome data may receive the highest priority, information associated with actualized outcomes (e.g., post-school success) cannot be ignored at the local level. Such data are critical to assessing the appropriateness of the articulated learning outcomes to real life

expectations. Additionally, system data (e.g., attendance or graduation rates, resource availability by school) are valuable for identifying problems that have an impact on student learning. Likewise, both system and actualized outcome data (e.g., healthy life styles or employment characteristics) are critical for working with the larger community in assessing community supports that are critical to actualizing desired and expected learning outcomes.

State Level

At the state level, the scope of responsibility broadens to a focus on each local entity (e.g., each school or each district). State level actions and decisions must support the local entity's efforts to produce quality learners. Even though the state does not provide direct day to day instruction, the constitutional authority and responsibility for public education rests with the state. Therefore, SEA employees are heavily vested in learning outcomes, both exit and enabling. However, at the state level, the scope is broader, and therefore, data from representative samples of students are sufficient.

Learning outcome data can assist state level staff in identifying those program improvement areas that require support. Additionally, learning outcome data can assist state staff in ascertaining the extent to which common expectations for students across the state are being met. Because students most likely will not live in one community all of their lives, and because states must be concerned with maintaining a state-wide quality of life, state representatives will want to identify outcomes that are pertinent to all at the local level. Determining the extent to which students generally are demonstrating behaviors associated with these outcomes is critical to the need to assess the state as a whole. In such an assessment, data can be used to determine the level of supports or program improvement efforts that are needed for each local entity.

A second need for learning outcome data is for analyzing policy decisions that guide and support program improvement and implementation at the local level. A third use is for communicating with legislators to assure that legislative decisions promote student learning and that fiscal resources are invested wisely. Finally, a fourth use of learning outcome data at the state level is to produce a state-wide picture that describes demonstrated learning throughout the state.

Those working at the state level do not have the luxury of having immediate, day to day interaction with students and communities. They also do not make decisions about individual students, but make generalizations about students. Therefore, relying on learning outcomes alone would result in making decisions with only partial information.

Post-school outcome data take on greater prominence. Such data assist SEA personnel in continually checking the relevance and appropriateness of state and district outcome expectations. They also help to identify those areas where the education system interfaces with the larger social system in order to identify supports or interventions needed from other agencies that are part of the larger system. Finally, they are critical to assuring the public that education is related to quality of life after school, rather than merely a set of isolated steps one must tolerate and through which one must move.

Additionally, a major function of the state is one of support of education through policy making and resource distribution. Policies and resources generally do not affect the learner directly; rather, they affect the system that supports the learner and reflect the valued expectations that the system is to meet. Therefore, data about the system are critical to good policy decisions. School exit rates (e.g., graduation and dropout rates), opportunities for participation, available community supports, teacher demonstrated skill, and available resources are examples of system outcomes we expect. As stated earlier, they do not guarantee acquisition

of learning outcomes by students, but they do reflect valued expectations that are critical for sustaining learning outcomes.

For state systems to be outcome based, such systems will need to depend on an equal amount of learning, actualized, and system outcome data. Clearly, learning outcomes form the basis of the original OBE movement. Adding actualized and system outcomes broadens the scope and potential use for outcome-based decision making about education at the state level.

National Level

While much emphasis is placed on education by many national politicians, education is, in fact, constitutionally a state responsibility. In the national arena, education-related actions have been directed toward supporting and sustaining the efforts of states in order to equitably affect and ensure a high quality of life for all citizens to, in the end, ensure the economic competitiveness of the United States. Such actions occur in the form of legislation, policy development, research support, and supplemental funding. In order to validate and support these actions, there is a need to demonstrate that education is resulting in increases in quality of life for U.S. citizens. A set of articulated learning outcome expectations can provide definition to quality of life and information about the expected outcomes can lead to better and more effective decision making.

Exit outcomes as defined by Spady and others in the OBE field are delineated from real life role functions. Communities that have gone through a consensus building process to determine such outcomes arrive at a set of statements that clearly articulate their expectations of those aspects that are associated with quality in one's life (Spady, 1992b). As more and more communities (local and state-wide) participate in such a process, it becomes evident that there is a set of common expectations among local and state communities. The common set of exit outcome expectations can serve as targets for national expectations (or standards).

Given a set of exit outcomes that help to establish national standards, learner data around these outcomes can serve to assist those at the national level to make more appropriate decisions. At this level, learning outcome data are particularly pertinent to instructional or program research efforts and to identifying program areas in need of supplemental funding. Naturally, if legislators are to appropriate dollars for program improvement, they also will want some learning outcome data to ensure accountability.

Much of the national effect on learning outcomes is indirect. A large percentage of the national effort is intended to more directly influence and change the system. Policies and regulations are directed toward changing system behavior first. Therefore, national representatives need outcome data that describe the changes. For example, policies related to least restrictive environment (LRE) are intended to ensure more opportunities for students with disabilities to become full participants in the community. Those at the national level will be interested in data that show evidence of students participating in general school environments as well as data that show that these students are participants in communities after leaving school (i.e., both system and actualized outcomes).

Another example is evident in policies related to transition from school. These policies are intended to influence the ability of students with disabilities to find and maintain employment and community living opportunities after leaving school. Data that describe employment and community living conditions of students who leave school are critical to determining the extent to which the transition policies are achieving the intended effects. Likewise, such data can be used to influence and support the development of future policy, as has happened with the transition from school policies.

Part of the national role is to secure federal dollars that provide direct support to students (e.g., purchase of supplemental services). Decisions and accountability assurances are best monitored through the use of learning outcome data, most specifically exit outcome data. However, a larger national effort is concerned with whether education (as a system) is on track and is affecting the quality of life throughout the nation (i.e., whether lives are enhanced by education). These needs are more specifically addressed through the use of both actualized and system outcome data.

Conclusion

Outcome-based education focuses on the outcomes or results of efforts rather than describing those things that are put into the system or the techniques and procedures used to influence effects. While the concept has received a great deal of support throughout the system, it has been much more difficult to obtain consensus on what those outcomes should be. This paper proposes that this difficulty has arisen because of differing perspectives and needs of those working in different parts of the system. Without clearly understanding these perspectives and the differing needs of the three levels of the educational system, achieving consensus will continue to be a challenge. On the other hand, if there is allowance for different uses for the term "outcomes," indeed different types of outcomes, and if there is willingness to define, clarify, and match the type of outcome with the needs of the different components of the system, the principles that started with the OBE movement and the data collected from an outcome-driven accountability system can be used effectively throughout the entire system. The end result will be an outcome-driven education system.

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